WHAT IS CLAIMED IS:

1. A light-emitting device including:

a plurality of pixels, said plurality of pixels including a plurality of switching TFTs, a plurality of current controlling TFTs, and a plurality of EL elements,

an emission brightness of the EL elements being controlled by video signals inputted to gate electrodes of the plurality of current controlling TFTs through the plurality of switching TFTs,

each of said plurality of current controlling TFTs including an active layer, a gate insulating film on the active layer, and a gate electrode on the gate insulating film,

said active layer including a source region, a drain region, and a channel forming region provided between the source region and the drain region, and

wherein a drain current of each of the plurality of current controlling TFTs when the emission brightness of the EL elements becomes maximum is Id, a mobility is μ, a gate capacitance per unit area is Co, a maximum gate voltage is $Vgs_{(max)}$, a channel width is W, a channel length is L, an average value of a threshold voltage is Vth, a deviation from the average value of the threshold voltage is ΔVth, and a difference in the emission brightness of the plurality of EL elements is within a range of $\pm n\%$,

$$A = \frac{2Id}{\mu * C_0}$$

$$\frac{A}{(Vgs_{(max)} - Vth)^2} \leqq \frac{W}{L} \leqq \left(\sqrt{1 + \frac{n}{100}} - 1\right)^2 * \frac{A}{\Delta Vth^2}.$$

2. A light-emitting device including:

a plurality of pixels, said plurality of pixels including a plurality of switching TFTs, a plurality of current controlling TFTs, and a plurality of EL elements,

an emission brightness of the EL elements being controlled by video signals inputted to gate electrodes of the plurality of current controlling TFTs through the plurality of switching TFTs,

each of said plurality of current controlling TFTs including an active layer, a gate insulating film on the active layer, and a gate electrode on the gate insulating film,

said active layer including a source region, a drain region, and a channel forming region provided between the source region and the drain region, and

wherein a drain current of each of the plurality of current controlling TFTs when the emission brightness of the EL element becomes maximum is Id, a mobility is μ, a gate capacitance per unit area is Co, a maximum gate voltage is $Vgs_{(max)}$, a channel width is W, a channel length is L, an average value of a threshold voltage is Vth, a deviation from the average value of the threshold voltage is ΔVth, and a difference in the emission luminance of the plurality of EL elements is within a range of $\pm$n%,

$$A = \frac{2Id}{\mu * C_0}$$

$$|\Delta Vth| \leqq (\sqrt{1 + \frac{n}{100}} - 1) * \sqrt{A * L/W} .$$

3. A light-emitting device including:

a source signal line driving circuit, a gate signal line driving circuit, a

pixel portion, a plurality of source signal lines, a plurality of gate signal lines, and power supply lines,

said pixel portion including a plurality of pixels,

said plurality of pixels including a plurality of switching TFTs, a plurality of current controlling TFTs, and a plurality of EL elements,

each of said EL elements including an anode, a cathode, and an EL layer provided between the cathode and the anode,

a gate electrode each of said plurality of switching TFTs being connected to each of the plurality of gate lines,

one of a source region and a drain region of each of said plurality of switching TFTs being connected to each of the plurality of source signal lines, and the other one thereof being connected to a gate electrode of each of the plurality of current controlling TFTs,

a source region of each of said plurality of current controlling TFTs being connected to each of the power supply lines, and a drain region thereof being connected to the anode or the cathode of each of the EL elements,

video signals being inputted to the plurality of source signal lines by the source signal line driving circuit,

the video signals inputted to the plurality of source signal lines being inputted to the gate electrodes of the plurality of current controlling TFTs through the plurality of switching TFTs so that an emission brightness of the plurality of EL elements is controlled,

each of said plurality of current controlling TFTs including an active layer, a gate insulating film on the active layer, and a gate electrode on the gate insulating film,

said active layer including a source region, a drain region, and a channel forming region provided between the source region and the drain region, and

wherein a drain current of each of the plurality of current controlling TFTs when the emission brightness of the EL element becomes maximum is Id, a mobility is μ, a gate capacitance per unit area is Co, a maximum gate voltage is $Vgs_{(max)}$, a channel width is W, a channel length is L, an average value of a threshold voltage is Vth, a deviation from the average value of the threshold voltage is ΔVth, and a difference in the emission luminance of the plurality of EL elements is within a range of $\pm n\%$,

$$A = \frac{2Id}{\mu * C_0}$$

$$\frac{A}{(Vgs_{(max)} - Vth)^2} \leqq \frac{W}{L} \leqq \left(\sqrt{1 + \frac{n}{100}} - 1\right)^2 * \frac{A}{\Delta Vth^2}.$$

4. A light-emitting device including:

a source signal line driving circuit, a gate signal line driving circuit, a pixel portion, a plurality of source signal lines, a plurality of gate signal lines, and power supply lines,

said pixel portion including a plurality of pixels,

said plurality of pixels including a plurality of switching TFTs, a plurality of current controlling TFTs, and a plurality of EL elements,

each of said EL elements including an anode, a cathode, and an EL layer provided between the cathode and the anode,

a gate electrode of each of said plurality of switching TFTs being connected to each of the plurality of gate lines,

one of a source region and a drain region of each of said plurality of switching TFTs being connected to each of the plurality of source signal lines, and the other one thereof being connected to a gate electrode each of said plurality of current controlling TFTs,

a source region of each of said plurality of current controlling TFTs

being connected to each of the power supply lines, and a drain region thereof being connected to the anode or the cathode of each of the EL elements,

video signals being inputted to the plurality of source signal lines by the source signal line driving circuit,

the video signals inputted to the plurality of source signal lines being inputted to the gate electrodes of the plurality of current controlling TFTs through the plurality of switching TFTs so that an emission brightness of the plurality of EL elements is controlled,

each of said plurality of current controlling TFTs including an active layer, a gate insulating film on the active layer, and a gate electrode on the gate insulating film,

said active layer including a source region, a drain region, and a channel forming region provided between the source region and the drain region, and

wherein a drain current of each of the plurality of current controlling TFTs when the emission brightness of the EL element becomes maximum is Id, a mobility is μ, a gate capacitance per unit area is Co, a maximum gate voltage is $Vgs_{(max)}$, a channel width is W, a channel length is L, an average value of a threshold voltage is Vth, a deviation from the average value of the threshold voltage is ΔVth, and a difference in the emission luminance of the plurality of EL elements is within a range of $\pm n\%$,

$$A = \frac{2Id}{\mu * C_0}$$

$$|\Delta Vth| \leqq (\sqrt{1 + \frac{n}{100}} - 1) * \sqrt{A * L/W}$$

5. A device according to claim 3,

wherein each of the current controlling TFTs is an n-channel TFT

and the drain region of each of the current controlling TFTs is connected to the cathode of each of the EL elements.

6. A device according to claim 3,

wherein each of the current controlling TFTs is a p-channel TFT and the drain region of each of the current controlling TFTs is connected to the anode of each of the EL elements.

7. A light-emitting device including:

a plurality of pixels, said plurality of pixels including a plurality of switching TFTs, a plurality of current controlling TFTs, and a plurality of EL elements,

an emission brightness of the EL elements being controlled by video signals inputted to gate electrodes of the plurality of current controlling TFTs through the plurality of switching TFTs,

each of said plurality of current controlling TFTs including an active layer, a gate insulating film on the active layer, and a gate electrode on the gate insulating film,

said active layer including a source region, a drain region, and a channel forming region provided between the source region and the drain region,

wherein a drain current of each of the plurality of current controlling TFTs when the emission brightness of the EL element becomes maximum is Id, a mobility is μ, a gate capacitance per unit area is Co, a maximum gate voltage is $Vgs_{(max)}$, a channel width is W, a channel length is L, an average value of a threshold voltage is Vth, a deviation from the average value of the threshold voltage is ΔVth, and a difference in the emission brightness of the plurality of EL elements is within a range of $\pm n\%$,

$$A = \frac{2Id}{\mu * C_0}$$

$$\frac{A}{(Vgs_{(max)} - Vth)^2} \leqq \frac{W}{L} \leqq \left(\sqrt{1 + \frac{n}{100}} - 1\right)^2 * \frac{A}{\Delta Vth^2}$$

a ratio of the channel width W to the channel length L in each of the pixels is different from one another according to a color displayed by each of the pixels.

8. A light-emitting device including:

a plurality of pixels, said plurality of pixels including a plurality of switching TFTs, a plurality of current controlling TFTs, and a plurality of EL elements,

an emission brightness of the EL elements being controlled by video signals inputted to gate electrodes of the plurality of current controlling TFTs through the plurality of switching TFTs,

each of said plurality of current controlling TFTs including an active layer, a gate insulating film on the active layer, and a gate electrode on the gate insulating film,

said active layer including a source region, a drain region, and a channel forming region provided between the source region and the drain region,

wherein a drain current of each of the plurality of current controlling TFTs when the emission brightness of the EL element becomes maximum is Id, a mobility is μ, a gate capacitance per unit area is Co, a maximum gate voltage is $Vgs_{(max)}$, a channel width is W, a channel length is L, an average value of a threshold voltage is Vth, a deviation from the average value of the threshold voltage is ΔVth, and a difference in the emission brightness of the plurality of EL elements is within a range of $\pm$n%,

$$A = \frac{2Id}{\mu * C_0}$$

$$|\Delta Vth| \leqq (\sqrt{1 + \frac{n}{100}} - 1) * \sqrt{A * L/W}$$

a ratio of the channel width W to the channel length L in each of the pixels being different from one another according to a color displayed by each of the pixels.

9. A device according to claim 1,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±5%.

10. A device according to claim 1,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±3%.

11. A device according to claim 1, wherein the maximum gate voltage is 25 V.

12. A device according to claim 1,

wherein the maximum gate voltage is 25 V and a ratio of the channel width W to the channel length L of each of the plurality of current controlling TFTs is $2.26 \times 10^{-3} \leqq W/L \leqq 0.214$.

13. A device according to claim 1,

wherein the gate capacitance is formed in a portion where the channel forming region, the gate insulating film, and the gate electrode overlap with one another in each of the current controlling TFTs.

14. A video camera using the light-emitting device of claim 1.

15. An image reproduction apparatus using the light-emitting device of claim 1.

16. A head mount display using the light-emitting device of claim 1.

17. A personal computer using the light-emitting device of claim 1.

18. A device according to claim 2,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±5%.

19. A device according to claim 2,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±3%.

20. A device according to claim 2, wherein the maximum gate voltage is 25 V.

21. A device according to claim 2,

wherein the maximum gate voltage is 25 V and a ratio of the channel width W to the channel length L of each of the plurality of current controlling TFTs is $2.26 \times 10^{-3} \leqq W/L \leqq 0.214$.

22. A device according to claim 2,

wherein the gate capacitance is formed in a portion where the channel

forming region, the gate insulating film, and the gate electrode overlap with one another in each of the current controlling TFTs.

23. A video camera using the light-emitting device of claim 2.

24. An image reproduction apparatus using the light-emitting device of claim 2.

25. A head mount display using the light-emitting device of claim 2.

26. A personal computer using the light-emitting device of claim 2.

27. A device according to claim 3,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±5%.

28. A device according to claim 3,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±3%.

29. A device according to claim 3, wherein the maximum gate voltage is 25 V.

30. A device according to claim 3,

wherein the maximum gate voltage is 25 V and a ratio of the channel width W to the channel length L of each of the plurality of current controlling TFTs is $2.26 \times 10^{-3} \leqq W/L \leqq 0.214$.

31. A device according to claim 3,

wherein the gate capacitance is formed in a portion where the channel forming region, the gate insulating film, and the gate electrode overlap with one another in each of the current controlling TFTs.

32. A video camera using the light-emitting device of claim 3.

33. An image reproduction apparatus using the light-emitting device of claim 3.

34. A head mount display using the light-emitting device of claim 3.

35. A personal computer using the light-emitting device of claim 3.

36. A device according to claim 4,

wherein each of the current controlling TFTs is an n-channel TFT and the drain region of each of the current controlling TFTs is connected to the cathode of each of the EL elements.

37. A device according to claim 4,

wherein each of the current controlling TFTs is a p-channel TFT and the drain region of each of the current controlling TFTs is connected to the anode of each of the EL elements.

38. A device according to claim 4,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±5%.

39. A device according to claim 4,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±3%.

40. A device according to claim 4, wherein the maximum gate voltage is 25 V.

41. A device according to claim 4,

wherein the maximum gate voltage is 25 V and a ratio of the channel width W to the channel length L of each of the plurality of current controlling TFTs is $2.26 \times 10^{-3} \leqq W/L \leqq 0.214$.

42. A device according to claim 4,

wherein the gate capacitance is formed in a portion where the channel forming region, the gate insulating film, and the gate electrode overlap with one another in each of the current controlling TFTs.

43. A video camera using the light-emitting device of claim 4.

44. An image reproduction apparatus using the light-emitting device of claim 4.

45. A head mount display using the light-emitting device of claim 4.

46. A personal computer using the light-emitting device of claim 4.

47. A device according to claim 7,

wherein the emission brightness of each of the plurality of EL elements

is within a range of ±5%.

48. A device according to claim 7,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±3%.

49. A device according to claim 7, wherein the maximum gate voltage is 25 V.

50. A device according to claim 7,

wherein the maximum gate voltage is 25 V and a ratio of the channel width W to the channel length L of each of the plurality of current controlling TFTs is $2.26 \times 10^{-3} \leqq W/L \leqq 0.214$.

51. A device according to claim 7,

wherein the gate capacitance is formed in a portion where the channel forming region, the gate insulating film, and the gate electrode overlap with one another in each of the current controlling TFTs.

52. A video camera using the light-emitting device of claim 7.

53. An image reproduction apparatus using the light-emitting device of claim 7.

54. A head mount display using the light-emitting device of claim 7.

55. A personal computer using the light-emitting device of claim 7.

56. A device according to claim 8,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±5%.

57. A device according to claim 8,

wherein the emission brightness of each of the plurality of EL elements is within a range of ±3%.

58. A device according to claim 8, wherein the maximum gate voltage is 25 V.

59. A device according to claim 8,

wherein the maximum gate voltage is 25 V and a ratio of the channel width W to the channel length L of each of the plurality of current controlling TFTs is $2.26 \times 10^{-3} \leqq W/L \leqq 0.214$.

60. A device according to claim 8,

wherein the gate capacitance is formed in a portion where the channel forming region, the gate insulating film, and the gate electrode overlap with one another in each of the current controlling TFTs.

61. A video camera using the light-emitting device of claim 8.

62. An image reproduction apparatus using the light-emitting device of claim 8.

63. A head mount display using the light-emitting device of claim 8.

64. A personal computer using the light-emitting device of claim 8.